# EXHIBIT 16

# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA (Alexandria Division)

ROSY GIRON DE REYES; JOSE	)
DAGOBERTO REYES; FELIX ALEXIS	)
BOLANOS; RUTH RIVAS; YOVANA	)
JALDIN SOLIS; ESTEBAN RUBEN MOYA	)
YRAPURA; ROSA ELENA AMAYA; AND	)
HERBERT DAVID SARAVIA CRUZ,	)
	)
Plaintiffs,	)
	)
V.	) C.A. No. 1:16CV563
	)
WAPLES MOBILE HOME PARK LIMITED	)
PARTNERSHIP; WAPLES PROJECT	)
LIMITED PARTNERSHIP; AND A.J.	)
DWOSKIN & ASSOCIATES, INC.,	)
	)
Defendants.	)
	)

## DECLARATION OF DANIEL H. WEINBERG

- I, DANIEL H. WEINBERG, hereby declare under penalty of perjury the following:
- 1. I am over the age of eighteen and I have personal knowledge of the information set forth below. If called upon to do so, I could testify competently to these matters.
- 2. I earned my Bachelor of Science degree in mathematics from the Massachusetts
  Institute of Technology in 1971. I subsequently earned a M.A., M.Phil. and Ph.D. in economics
  from Yale University in 1972, 1973 and 1975 respectively. I was employed by the U.S.
  Department of Commerce, Census Bureau, for twenty-five years. My positions included: Chief,
  Housing and Household Economic Statistics Division; Chief Economist and Chief, Center for
  Economic Studies; Assistant Director for Decennial Census and American Community Survey;
  and Senior Research Scientist. My experience is more fully described in the resume attached to
  the expert report I provided in this matter which is attached as Exhibit 1.

- 3. I was retained by the defendants in this case to review the opinions of Professor William A.V. Clark offered on behalf of the Plaintiffs in this case and the reliability of his opinions.
- 4. As discussed in detail in my attached report, Professor Clark assumed a Margin of Error ("MOE") of 26% for his opinion as to the number of undocumented Hispanics living in Fairfax County VA Census Tract 4406 in which the Waples Trailer Park is located. Based on that MOE, Professor Clark cannot estimate the undocumented population in Census Tract 4406 to a reasonable degree of certainty.
- 5. Moreover, the actual MOE for Professor Clark's estimate as to the number of undocumented Hispanics living in Census Tract 4406 in which the Waples Trailer Park is located is more than 100% rendering the estimate completely unreliable and statistically indistinguishable from zero.
- 6. Professor Clark's 26% MOE, as he states in his report, is based upon the MOE from the American Community Survey ("ACS") for the number of Hispanics in Census Tract 4406 not the number of undocumented Hispanics. The ACS does not estimate the number of undocumented persons of Hispanic or any other ethnicity.
- 7. To estimate the number of undocumented Hispanics, Professor Clark relied on data from the Center for Migration Studies ("CMS") which, at the national level, has a MOE of 9%. As the size of the sample on which an estimate is based decreases, i.e., goes from the nation to the state, county, and then census tract levels, the MOE increases each step of the way. This is a basic statistical concept associated with sample surveys.
- 8. Professor Clark relied upon CMS data for a Public Use Microdata Area ("PUMA") that includes the Waples Trailer Park and has a population of approximately 158,000.

Attached as Exhibit 2 are tables derived from the CMS data base that show the CMS estimates of the undocumented population for Fairfax County and for the PUMA relied upon by Professor Clark that includes the Waples Trailer Park. CMS does not publish a MOE at these levels and Professor Clark did not attempt to determine the MOE at the PUMA level or at the much smaller Census Tract level independently. Rather, he relied on the MOE estimate for the number of Hispanics in Census Tract 4406, a number that is a gross underestimate of the true MOE.

9. I used CMS's national estimate of 9% MOE for undocumented immigrants as the starting point for determining the MOE for an estimate of undocumented immigrants at the Census Tract level, which here has a population of just over 3,000. My results, set forth in the attached report, shows an extraordinarily high MOE that renders Professor Clark's estimate completely unreliable.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and information.

Date: 4 January 2017

# EXHIBIT 16(1)

# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA ALEXANDRIA DIVISION

ROSY GIRON DE REYES, et al.,

Plaintiffs,

 $V_{\bullet}$ 

WAPLES MOBILE HOME PARK LIMITED PARTNERSHIP, et al.,

Defendants.

Civil No.: 1:16ev563-TSE-TCB

EXPERT REPORT OF DANIEL H, WEINBERG, PH.D.

This report analyzes the submission of the Plaintiffs' expert witness, Professor William A. V. Clark. The demographic analysis performed by Professor Clark to estimate the undocumented population of Fairfax County, Virginia, Census Tract 4406 substantially understates its Margin of Error ("MOE"). The actual MOE for the analysis performed by Professor Clark is significantly greater than 26% he imputes, indeed it is greater than 100%, demonstrating that Professor Clark's conclusions about the number of undocumented Hispanics in the census tract lack a reasonable basis. Finally, Professor Clark performed no analysis of undocumented non-Hispanic residents of Asian race in the subject census tract even though such Asians account for an estimated 37% of the undocumented population in the Public Use Microdata Area containing the subject census tract according to my analysis.

### Opinions

I will offer the following opinions in this matter:

- 1. Professor Clark's estimate of the undocumented Hispanic population in Census Tract 4406 is inherently unreliable because the Center for Migration Studies ("CMS") data that he relies upon has a MOE of 9% at the national level, resulting in a MOE of greater than 100% at the census tract level.
- 2. Moreover, the CMS data is unreliable at both the Public Use Microdata Area ("PUMA") level (areas of 100,000 population or more) and at the Census Tract level and cannot be relied upon to estimate undocumented population levels at the PUMA or Census Tract level.
- 3. Professor Clark assumes a MOE of 26% for his estimate of the undocumented Hispanic population for Census Tract 4406 based on the MOE for all Hispanics in Census Tract 4406 as estimated by the American Community Survey ("ACS") for 2010-2014. As stated in paragraph 1 above, Professor Clark's MOE for the undocumented Hispanic population for Census Tract 4406 is greatly understated. Further, a MOE of 26%, while sufficient for some statistical uses, is not sufficient to establish the undocumented population in Census Tract 4406 to a reasonable degree of certainty.
- 4. The CMS data relied upon by Professor Clark at the PUMA and Census Tract levels is inherently unreliable to estimate the total undocumented population in Census Tract 4406 in general and is even more unreliable in attempting to estimate a specific subgroup of the undocumented population in Census Tract 4406.
- 5. Professor Clark performed no analysis of the undocumented non-Hispanic Asian population in Census Tract 4406; which population is 37% of the total undocumented population for the PUMA relied upon by Professor Clark. Therefore, Professor Cark's conclusion that Latinos are seven times more likely to be undocumented than other groups lacks a reasonable basis.

# Basis and Reasons for Opinions

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### Background

The analysis performed by Professor Clark is based on two primary sources of data - the U.S. Census Bureau's American Community Survey (ACS), and estimates of the undocumented resident population created by Mr. Robert Warren for the Center for Migration Studies (CMS), who used both ACS data and administrative records from the Department of Homeland Security (DHS) on immigration.

# The American Community Survey

Prior to the 2010 Census, the only way to collect data sufficient to make estimates of the demographic, social, economic, and housing characteristics of small geographic areas was to administer a "long form" census questionnaire to a sample approximately 1-in-6 households as their decennial census questionnaire. This source of data for small geographic areas was replaced by the ACS starting in 2005 and the long-form census was eliminated from the 2010 Census.

The ACS draws an annual sample of approximately 3.54 million addresses in all geographic areas in the states, the District of Columbia, and Puerto Rico. This equates to approximately 2.5% of the population in the U.S. It uses the Internet, the U.S. mail, telephone interviewing. and personal interviewing to collect answers from the households at those addresses. Over a 5year period, roughly 11-12 percent of all addresses in the U.S. are represented in the ACS, making it the largest household survey in the U.S. However, as a sample, it is significantly less comprehensive and reliable than the Decennial Census.

# Estimating Uncertainty: Sampling and Nonsampling Error

Any data collection, including the decennial census, potentially involves two kinds of errors -sampling error and nonsampling error. The Census Bureau describes these two types of error as follows:2

- Sampling Error The data in the ACS products are estimates of the actual figures that would have been obtained by interviewing the entire population using the same methodology. The estimates from the chosen sample also differ from other samples of housing units and persons within those housing units. Sampling error in data arises due to the use of probability sampling, which is necessary to ensure the integrity and representativeness of sample survey results. The implementation of statistical sampling procedures provides the basis for the statistical analysis of sample data.
- Nonsampling Error In addition to sampling error, data users should realize that other types of errors might be introduced during any of the various complex operations used to collect and process survey data. For example, operations such as data entry from

<sup>1</sup> http://www2.census.gov/programs-

surveys/acs/methodology/design\_and\_methodology/acs\_design\_methodology\_report\_2014.pdf.

<sup>&</sup>lt;sup>2</sup> http://www2.eensus.gov/programs-

surveys/acs/tech\_does/accuracy/MultiyearACSAccuracyofData2014.pdf, pp. 9-10.

questionnaires and editing may introduce error into the estimates. Another source is through the use of controls in the weighting. The controls are designed to mitigate the effects of systematic undercoverage of certain groups who are difficult to enumerate and to reduce the variance. The controls are based on the population estimates extrapolated from the previous census. Errors can be brought into the data if the extrapolation methods do not properly reflect the population. However, the potential risk from using the controls in the weighting process is offset by far greater benefits to the ACS estimates. These benefits include reducing the effects of a larger coverage problem found in most surveys, including the ACS, and the reduction of variances of ACS estimates. These and other sources of error contribute to the nonsampling error component of the total error of survey estimates. Nonsampling errors may affect the data in two ways, Errors that are introduced randomly increase the variability of the data. Systematic errors, which are consistent in one direction, introduce bias into the results of a sample survey. The Census Bureau protects against the effect of systematic errors on survey estimates by conducting extensive research and evaluation programs on sampling techniques, questionnaire design, and data collection and processing procedures. In addition, an important goal of the ACS is to minimize the amount of nonsampling error introduced through nonresponse for sample housing units. One way of accomplishing this is by following up on mail nonrespondents during the [computer-assisted telephone and personal interviewing] phases.

As noted in the paragraph above, the Census Bureau, in preparing the survey data for analysis by themselves and others, does attempt to correct for nonsampling error by, among other approaches, reweighting the sampled households to account for certain types of undercoverage and nonresponse, but it is unlikely to be able to account for all such sources of potential error. The Census Bureau uses estimates from its Population Estimates Program to reduce nonsampling error, that is, estimates of key demographic characteristics from the ACS are modified to match estimates obtained from non-survey sources such as the prior decennial census, and from vital statistics on births and deaths. As noted by the Census Burcau, "In particular, the ACS uses ratio estimation to take advantage of independent population estimates by sex, age, race, and Hispanic origin, and estimates of total HUs [housing units] produced by the Population Estimates Program (PEP) of the Census Bureau. This results in an increase in the precision of the estimates and corrects for under-/overcoverage by geography and demographic detail. This method also produces ACS estimates consistent with the population estimates by these characteristics and the estimates of total HUs for each county in the United States."3 The ACS estimates of the particular topies, such as the number of Hispanics in each state, are considered to have no sampling error, as they are deliberately controlled to externally sourced quantities, while other estimates at the state and national level, such as the number of foreign born, do have sampling error.

http://www2.census.gov/programs-surveys/acs/methodology/design\_and\_methodology/acs\_design\_methodology\_report\_2014.pdf, p. 135.

To account for sampling error and to provide guidance for data users, the Census Bureau publishes a measure of uncertainty for each estimate - the so-called "90% Margin of Error" (MOE). "The Census Bureau recommends that data users incorporate this information into their analyses, as sampling error in survey estimates could impact the conclusions drawn from the results." They further note (pp. 10-11), "A sample estimate and its estimated standard error may be used to construct confidence intervals about the estimate. These intervals are ranges that will contain the average value of the estimated characteristic that results over all possible samples. with a known probability. For example, if all possible samples that could result under the ACS sample design were independently selected and surveyed under the same conditions, and if the estimate and its estimated standard error were calculated for each of these samples, then ... Approximately 90 percent of the intervals from 1.645 times the estimated standard error below the estimate to 1.645 times the estimated standard error above the estimate would contain the average result from all possible samples. ... The margin of error is the difference between an estimate and its upper or lower confidence bound. Both the confidence bounds and the standard error can easily be computed from the margin of error. All ACS published margins of error are based on a 90 percent confidence level,"

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Another way to understand the confidence intervals is as follows. Given the population in any subject geography, there are many different ways to draw a sample of that population for a survey. However, the survey organization draws just one sample (for a given time period). Using statistical science, the 90% confidence interval for any particular estimate from that one sample (that is, the estimate plus or minus the 90% MOE) will contain the estimate obtained from all possible samples 90 percent of the time. Thus it becomes a measure of uncertainty in the estimate. In simpler terms, the 90% MOE can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value.

In order to preserve the confidentiality of responses and provide estimates with reasonable margins of error, the Census Bureau aggregates the response for many households and reports the data only for those aggregates (defined as particular population groups for particular geographies). For the ACS, the Census Bureau reports estimates using either 1 year or 5 years of data. For areas and groups of 60,000 population of more (such as Fairfax County), estimates cover a single year of data, but for smaller areas (such as Fairfax County tract 4406), the data are aggregated over 5 years. When presenting estimates for both large and small areas, the Census Bureau recommends using the same time period (in this case, 5 years) to provide comparable estimates. As of November 2016, the latest such 5-year aggregate covers 2010 through 2014 (the 2011-2015 data for census tracts will be released in December 2016).5

surveys/aes/tech\_does/accuracy/MultiyearACSAccuracyofData2014.pdf, p. 10.

http://www2.census.gov/programs-

## Population and Housing Data; Estimation of the Undocumented Population

In the Table 1 below, I reproduce Professor Clark's extracts from the ACS published data, along with their estimated 90% MOE, and data on the non-Hispanic Asian population. In Table 2 below. I reproduce the estimates of the undocumented population derived from the Center for Migration Studies (CMS). Note that the CMS does not provide estimates of uncertainty in their tables. However, the documentation accompanying the estimates presents an estimate of uncertainty for the national estimate of undocumented residents (11.0 million) of +/- 1 million (9%) for 2013. The data for his estimate come from two sources: the ACS, and administrative records from the DHS. The DHS data are derived from administrative records on legal immigration.

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Mr. Warren did not identify the specific confidence interval he used to create the estimated margin of error for his derived estimate of the undocumented population at the national level, but since the starting point for his estimates is based on the ACS, I assume for the purpose of this report that Mr. Warren's own estimate of uncertainty in his estimate of the undocumented population of a margin of error of 9% at the national level is the 90% MOE (the level for which ACS estimates are reported). Hispanics are estimated by CMS to account for 52.8 percent of the undocumented population of 11,257 in the "Fairfax County (Central) & Fairfax City--Burke-VA" (Burke) PUMA that contains tract 4406, and non-Hispanic Asians are estimated to account for 37.1 percent. (A Public Use Microdata Area or PUMA is an artificial geographic area constructed by the Census Bureau to allow it to release data for all lower levels of geography than the state level from the ACS annually; all PUMAs must contain 100,000 or more people.)

As Professor Clark did, I need to make some assumptions about how to derive the number of undocumented residents in Census Tract 4406. However, to be consistent with the approach of Mr. Warren in deriving the total Hispanic undocumented population in that tract, one needs to also account statistically for the undercounted population of Hispanies (and Asians) in that tract: Professor Clark did not do so, so he might well have underestimated that population. The undercount is the population in housing units missed by the Census Bureau when it compiled the sampling frame (the list of potential addresses to interview households) for the ACS, derived from the Census Bureau's Master Address File (MAF), plus the population in interviewed households not reported by the residents, net of potential overcounts (e.g., duplications). Mr. Warren estimated that the undercounted undocumented population accounted for 0.8 million of his estimate of 11.0 million for the total U.S. undocumented population in 2013, For the 2010

<sup>7</sup> The MAF is updated frequently (for example, twice a year using the U.S. Postal Service Delivery Sequence File), but most thoroughly by the in-person address canvasing last conducted in 2009.

The estimates and their methodology are discussed at http://emsny.org/publications/warren-11million/, cited by Professor Clark as Robert Warren (2015), "The Estimated Undocumented Population: 11 Million: How Do We Know". The "residual estimation" methodology he used is described further in Robert Warren, "Democratizing Data about Unauthorized Residents in the United States: Estimates and Public-Use Data, 2010 to 2013", (CMS Journal on Migration and Human Security) at http://jmhs.cmsny.org/index.php/jmhs/article/view/38. The Journal on Migration and Human Security is described as a peer-reviewed public policy publication of the Center for Migration Studies.

Census, Census Bureau analysis found that "the 2010 Census had a net overcount of 0.01 percent, meaning about 36,000 people were overcounted in the census. This sample-based result, however, was not statistically different from zero,"8 However, the Census Bureau estimated that while the 2010 Census undercounted Hispanics by 1.5 percent, the Census did not undercount Asians (an estimated undercount of 0.1 percent, not statistically different from zero).

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The ACS estimated that there were 20,098 Hispanies in the Burke PUMA and 957 Hispanies in tract 4406 in 2010-2014 (4.76% of the tract's total population). The ACS estimated that there were 26.716 non-Hispanic Asians in the Burke PUMA and 674 non-Hispanic Asians in tract 4406 in 2010-2014 (2.52%). Using these percentages without adjustment for the probable undercount of Hispanies, we derive an estimate that of the 5,9479 estimated undocumented Hispanies in the Burke PUMA, 283 (that is, 4.76%) were in tract 4406. Adjusting this number for the probable undercount of 1.5% yields a point estimate of 287 undocumented Hispanies in tract 4406. (Professor Clark estimates 301 using his methodology.) For non-Hispanic Asians. 2.52% of the estimated 4,173 undocumented non-Hispanic Asians in the Burke PUMA yields a point estimate of 105 undocumented non-Hispanic Asians in tract 4406 (it is unnecessary to correct for undercount for this estimate).

Taking account of all sources of uncertainty, how uncertain are the estimates of the undocumented population of census tract 4406?

Professor Clark calculated the 90% MOE for his estimate as 26%, using the 90% MOE for the estimated total Hispanic population in tract 4406, yielding an estimate of 223-379 undocumented Hispanics. However, the number of Hispanics is controlled by the Census Bureau to an independently derived estimate at the state level that is assumed to have no sampling error. Consequently, the 26% MOE estimate cannot account for the uncertainty in the CMS estimate of the undocumented population, which is 9% at the national level. Since Mr. Warren did not make any estimates of the MOE of the undocumented population below the national level, it is necessary to make some additional assumptions to derive an estimate of the 90% MOE for the undocumented population at smaller geographic levels. Since the estimate of the undocumented population at the national level was derived in large part from the ACS, I will use the ACS as a guide for deriving a 90% MOE for the estimate of the undocumented population at the tract level. In all cases, as one drops from a higher geographic level (e.g., the nation or a state) to a lower geographic level (e.g., a PUMA or a census tract), the number of households on which the estimate is based drops as well, and therefore the associated margin of (sampling) error increases.

I base my estimate of the 90% MOE for the undocumented population on the ACS estimates for the foreign-born population, a population whose size is estimated (not controlled) by the ACS at the national and state levels and whose characteristics are likely to be closest to those of the undocumented population (see Table 3). 10 Using the estimates in Table 3, the uncertainty of the

https://www.census.gov/newsroom/releases/archives/2010\_census/eb12-95.html.

<sup>&</sup>lt;sup>9</sup> Professor Clark notes this number as 5,944, a probable typo.

<sup>&</sup>lt;sup>10</sup> I submit that the choice of a different population is not likely to matter very much, unless one chooses a population, such as the number of Hispanies, controlled at the state level.

estimate of total number of undocumented residents in the Burke PUMA is 14.94 times the estimate of 90% MOE at the national level (9%) or 134%. The estimate of the uncertainty at the tract 4406 level is 89.94 times the estimate of uncertainty at the national level, or 809%. I note further that the estimates for the 90% MOE for subsets of the total undocumented population (such as Hispanics or non-Hispanic Asians) would be even larger than these estimates. Thus, even if the uncertainty in an estimate at the tract level for the number of undocumented Hispanies were only one-eighth as large as the estimated uncertainty at the tract level for total undocumented residents, the resulting estimate of the 90% MOE of 101% would statistically invalidate any assertion or estimate of the number of undocumented residents in census tract 4406 in 2010-2014 and would statistically invalidate any estimate of the subset of such a population, such as Hispanic or Asian.

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# Facts or Data Considered

In addition to the data and resources identified in this report, I considered the following facts or data in reaching my opinions in this matter:

Expert Report of William A.V. Clark, PH.D. 1.

### Qualifications

I am a statistician and economist by training, holding a Ph.D. and two Masters degrees in economics from Yale University and a B.S. in mathematics from the Massachusetts Institute of Technology. I am currently Principal of DHW Consulting and a Fellow of the American Statistical Association, but of most relevance to this topic, I spent over 34 years working for the Federal government, with the last 25 years as a senior management executive and research scientist at the U.S. Census Bureau. My experience includes being the division director with responsibility for all housing surveys at the Census Bureau (such as the American Housing Survey and the Housing Vacancy Survey), and as Assistant Director for Decennial Census and the American Community Survey. I have been involved with the development and analysis of the ACS since the mid-1990s, including acting as Chief of the American Community Survey Office, and I have published research which has analyzed the ACS data. I have received recognition for my research and management activities, including the Roger Herriot Award for Innovation in Federal Statistics, the Heyman Service to America Medal, and the Department of Commerce Bronze, Silver, and Gold Medals. A complete resume, including a list of my publications, is attached to this report as Exhibit A.

I have not testified as an expert witness at trial or by deposition in any other case during the last four years,

### Compensation

My hourly rate for research and testimony in this case is \$250. My compensation is not tied to or contingent upon the outcome of this litigation.

Daniel H. Weinberg

TABLE 1. Population and Housing Estimates from the American Community Survey, 2010-2014

	Virginia		Fairfax County, Virginia	ounty,	Census Tract 4406, Fairfax County,	ct 4406, unty,	Fairfax County (Central) & Fai	Fairfax County (Central) & Fairfax
					Virginia		City-Bur Virginia	City-Burke PUMA, Virginia
	Estimat	Margin E	Estimat	Margin of Error	Estimate	Margin of Error	Estimat	Margin of Estimat Margin of Error
Total Population	8,185,13	* * * * * * * * * * * * * * * * * * * *	1,117,07	* * *	3,294	+/-226	+/-226 157.793	+/-1,548
Not Hispanic or	7.497,86	+/-341	938,150	* * * *	2.337	+/-157	+/-157 137.695	+/-1,742
White alone	5,227,41	5,227,41 +/-1,146	594,129	+/-360	1,510	+/-153	96.415	+/-1,710
Asian alone	472,435	472,435   +/-3,182   201,177	201.177	+/-1,503	674	+/-126	26.716	+/-1,256
Hispanic or Latino	687.265	+/-341	+/-341 178,922	****	957	+/-251	20,098	+/-1,423

Total housing units	3,403,24	3.403.24 +/-1,009 409.108	409,108	+/-339	948	+/-22	52,365	+/-246
Mobile homes	180,419	180,419 +/-2,687	2.070	+/-335	118	+/-38	138	+/-46
Median value	243,500	+/-674	+/-674 486.900	+/-2,590	428,400	428,400 +/-15,193	498,700	+/-4,956
(dollars)								

Sources: 2010-2014 ACS Tables B03002, B25024, B25077.

Notes: "\*\*\*\*" indicates that the estimate is used as a control total and does not have sampling error since it is derived from administrative records (e.g., vital statistics) and the 2010 Census. PUMA = Public Use Microdata Area.

TABLE 2. Estimates of the Undocumented Population from the Center for Migration Studies, 2014

	Fairfax County plus the independent cities of Fairfax and Falls Church	ty plus the sities of alls	Fairfax County (Central) & Fairfax CityBurke-VA PUMA	Central) & rke-VA
		Pct. Dist.		Pct. Dist.
Total Undocumented	97,655	100.00%	11.257	100.00%
Hispanic	54.879	56.20%	5.947	52.80%
Not Hispanic	42,776	43.80%	5,309	47.16%
Asian (not Hispanic)	31,644	32.40%	4.173	37.10%
Black (not Hispanic)	6,485	%09.9	858	7.60%
White (not Hispanic)	4,384	4.50%	278	2.50%
Other (not Hispanic)	263	0.30%	0	%00.0

Source: http://data.cmsny.org/.

Notes: PUMA = Public Use Microdata Area.

TABLE 3. Foreign-Born Population Estimates from the American Community Survey, 2010-2014

		Margin of		
	Estimate	Error	Ratio:	Ratio vs.
		(MOE)	MOE/Estimate	US
United States	41,056,885	-/-	0.0025	1.00
		102,798		
Virginia	948,484	+/-6,771	0.0071	2.85
Fairfax County, Virginia	333,097	+/-3.987	0.0120	4.78
Fairfax County (Central) & Fairfax City-Burke PUMA, Virginia	37,928	+/-1,419	0.0374	14.94
Census Tract 4406, Fairfax County,	1,310	+/-295	0.2252	89.94
Virginia				

Source: 2010-2014 ACS Table B05002.

Notes: PUMA = Public Use Microdata Area.

# **EXHIBIT A**

November 2016

### DANIEL H. WEINBERG

### PERSONAL DATA

Home: 2501 Lisbon Lane Alexandria, VA 22306

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Email address: dhweinberg@gmail.com

Citizenship: U.S.A.

#### **EMPLOYMENT**

DHW Consulting

Principal, 2014-present

Clients include Booz Allen Hamilton, 2015-present; NSF-Census Bureau Research Network Coordinating Office, 2016-present; ICF International, 2014-2015.

Social and Decision Analytics Laboratory, Biocomplexity Institute of Virginia Tech

Visiting Scholar, 2014-2016

National Academy of Sciences, Committee on National Statistics

Senior Program Officer, 2014; Expert Consultant, 2016

U.S. Department of Commerce, Census Bureau [Senior Executive Service except where noted]

Senior Research Scientist, 2010-2014 [Senior Technical position]

Assistant Director for American Community Survey and Decennial Census, 2007-2010 (includes periods where I also acted as Chief, Geography Division, and Chief, American Community Survey Office)

Chief Economist and Chief, Center for Economic Studies, 2005-2007

Chief, Housing and Household Economic Statistics Division, 1989-2004

(includes periods where I also acted as Associate Director for Demographic Programs)

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Income Security Policy

Acting Deputy Assistant Secretary, 1989

Division of Policy Research and Analysis

Director, 1988-1989

Acting Director, 1982-1983, 1984-1985, 1987-1988

Deputy Director, 1985-1988

Senior Economist, 1980-1989

Abt Associates Inc.

Senior Economist, 1976-1980

Tufts University

Visiting Lecturer, 1980

Yale University

Lecturer, 1975-1976

Teaching Fellow, Acting Instructor, 1973-1975

Research Assistant, 1971-1972

National Bureau of Economic Research

Research Associate, 1975-1976

Research Assistant and Programmer, 1972-1975

Port of New York Authority, Aviation Economics Division

Research Assistant, 1970, 1971

### EDUCATION

Massachusetts Institute of Technology, 1971 (mathematics) B.S.

Yale University, 1972 (economics) M.A. Yale University, 1973 (economics) M.Phil. Ph.D. Yale University, 1975 (economics)

### PROFESSIONAL ORGANIZATIONS

American Economic Association American Statistical Association Association for Public Policy Analysis and Management NBER Conference on Research in Income and Wealth Senior Executives Association Urban Economics Association Washington Statistical Society

### HONORS AND AWARDS

Presidential Letter of Commendation, 1988

Department of Commerce Bronze Medal, 1995

Census Bureau Honorary Mathematical Statistician, 1996

Vice President's Reinventing Government ("Hammer") Award, 1998, 1999

Fellow of the American Statistical Association, 1999

Census Bureau Equal Employment Opportunity Award, 2000

Roger Herriot Award for Innovation in Federal Statistics, 2002

Samuel J. Heyman Service to America Social Services Medal, 2002

Department of Commerce Silver Medal (group award), 2003

Department of Commerce Gold Medal (group award), 2011

Halbert C. Smith Honorary Fellow, Weimer School of Advanced Studies in Real Estate and Land Economics, 2014

### OTHER PROFESSIONAL ACTIVITIES

American Economic Association

Associate Editor (Policy Watch), Journal of Economic Perspectives, 1993-1996.

American Statistical Association

Social Statistics Section: Secretary-Treasurer 1992-1993; Chair 1995-1996; Jeanne Griffith Award [for Mentoring] Committee Member 2003-2009; Fellows Nominating Committee Member 2005, Chair 2006; Council of Sections Representative 2007-2009.

Government Statistics Section: Roger Herriot Award [for Innovation in Federal Statistics Committee Member 2005-2007, Chair 2007.

Association for Public Policy Analysis and Management

Member Policy Council 1995-1998; Treasurer 2003-2004.

Association of National Census and Statistics Directors of America, Asia, and the Pacific Board of Directors, 2009-2010.

National Science Foundation:

Panel Study of Income Dynamics, Board of Overseers: Member (ex-officio) 1984-1989.

Senior Executives Association, Department of Commerce Chapter

Board of Directors 1997-2007; Vice President 1998; President 1999-2001 (1999 SEA Chapter award).

Society of Government Economists

Bulletin editor 1988-1989 (Board of Directors, ex-officio).

Standard Occupational Classification Revision Policy Committee and its successor Standard Occupational Classification Policy Committee Member 1995-2004; Chair 1996-1999.

Statistics Canada

2016 Census Expert Panel Review Committee: Member, 2011-2012.

Testimony: U.S. Congress Joint Economic Committee (September 1992), House of Representatives Ways and Means Committee (October 1993, March 1998); Canadian House of Commons Committee (March 1993), U.S. Commission on Civil Rights (May 2015).

United Nations

Expert Group on Population and Housing Censuses, Economic Commission for Europe: Member 2008-2010; Expert [Canberra] Group on Household Income Statistics: Member 1996-2000, Editorial Advisory Board 2000.

U.S. Bureau of Labor Statistics

National Longitudinal Surveys, Technical Review Committee: Member 1988-1996.

U.S. Census Bureau

Designated Federal Official, Census Bureau Advisory Committee of Professional Associations, 2005-2008; Program Champion for Mentoring Program, 2006-2008.

U.S. Department of Health and Human Services

Advisory Committee for Evaluation of the JOBS Program: Member 1990-1995.

Urban Institute

"Assessing the New Federalism", Technical Advisory Committee: Member 1996-

Urban Studies

Advisory Editor (North America) 1979-1984.

### BOOKS AND MONOGRAPHS

Racial and Ethnic Residential Segregation: 1980-2000 (with J. Iceland) U.S. Census Bureau Census 2000 Special Report CENSR-3, 2002.

Confronting Poverty: Prescriptions for Change (edited with S. Danziger and G. Sandefur). Harvard University Press, 1994.

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- "Talent Recruitment and Firm Performance: The Business of Major League Sports" Journal of Sports Economics, August 2014.
- "Management Challenges of the 2010 U.S. Census" Journal of Official Statistics, June 2012.
- "U.S. Neighborhood Income Inequality in the 2005-2009 Period" U.S. Census Bureau American Community Survey Report ACS-16, October 2011.
- "Organization and Administration of the U.S. Census" (with J. Thompson), in Encyclopedia of the U.S. Census, Second Edition, edited by M. Anderson, C. Citro, and J. Salvo, October 2011.
- "Earnings by Gender: Evidence from Census 2000" Monthly Labor Review (July/August 2007).
- "Poverty Estimates for Rural, Urban, Metropolitan, and Non-Metropolitan Areas, and for Places in the United States" *The Rural Sociologist*, June 2006.
- "Income Data Quality Issues in the Annual Social and Economic Supplement to the Current Population Survey" Monthly Labor Review, June 2006.
- "How the United States Measures Well-Being in Household Surveys" Journal of Official Statistics, March 2006.
- "Evidence From Census 2000 About Earnings by Detailed Occupation for Men and Women" U.S. Census Bureau Census 2000 Special Report CENSR-15, May 2004.
- "Measuring Poverty: Issues and Approaches", in Race, Poverty, and Domestic Policy (edited by C. M. Henry), Yale University Press, 2004.
- "The Survey of Program Dynamics: Comment [on Rossi]" (with S. Shipp), in D. Besharov and P. Germanis (eds.) Four Evaluations of Welfare Reform: What Will Be Learned?. November 2001 and Family Well-Being After Welfare Reform, February 2002.

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"Revising the Standard Occupational Classification" (with C. Levine and L. Salmon) Monthly Labor Review, May 1999; reprinted as U.S. Bureau of Labor Statistics Report 929. June 1999.

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"Measuring the Impact of Welfare Reform with the Survey of Program Dynamics" (with P. Dovle, A. Jones, S. Shipp) American Statistical Association: 1998 Proceedings of the Social and Government Statistics Sections, 1999.

"International Symposium on Linked Employer-Employee Data: Program Development and Policy Analysis" Monthly Labor Review, July 1998.

"A Survey of Program Dynamics for Evaluating Welfare Reform" (with V. Huggins, R. Kominski, and C. Nelson), November 1997 Statistics Canada Symposium XIV "New Directions in Surveys and Censuses", 1998.

"Data Challenges of Welfare Reform" American Statistical Association: 1997 Proceedings of the Social and Government Statistics Sections, 1998.

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- "Comments on Measuring Poverty" American Statistical Association: 1995 Proceedings of the Government Statistics Section, 1996.
- "Editors' Introduction" (with S. Danziger and G. Sandefur) and "The Historical Record: Trends in Family Income, Inequality, and Poverty" (with S. Danziger), in Confronting Poverty: Prescriptions for Change (edited by S. Danziger, G. Sandefur, and D. Weinberg), 1994.
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- "Measurement of Need: The U.S. Poverty Line" (with E. Lamas) American Statistical Association: 1993 Proceedings of the Social Statistics Section, 1994.
- "Remarks" Proceedings of the International Occupational Classification Conference, U.S. Bureau of Labor Statistics, September 1993.
- "How Important Were Changes in Racial and Ethnic Residential Segregation Between 1980 and 1990?" (with R. Harrison) American Statistical Association: 1992 Proceedings of the Social Statistics Section, 1993.
- "Why Were Poverty Rates So High in the 1980's?: Comment" and "The Changing Contributions of Men and Women to the Level and Distribution of Family Income, 1968-1988: Comment" in D. Papadimitriou and E. Wolff (eds.) Poverty and Prosperity in the USA in the Late Twentieth Century, 1993.
- "The History and Current Issues of U.S. Poverty Measurement" (with E. Lamas) in Polish Statistical Association/Central Statistical Office (eds.) Poverty Measurement for Economies in Transition in Eastern European Countries, 1992.
- "NRC Report on Microsimulation: Comment", American Statistical Association: 1991 Proceedings of the Social Statistics Section, 1992.
- "The Role of Evaluation in State Welfare Reform 'Waiver' Demonstrations" (with M. Fishman) in C. Manski and I. Garfinkel (eds.) Evaluating Welfare and Training Programs. 1992.
- "Poverty Dynamics and the Poverty Gap, 1984-1986" Journal of Human Resources, Summer 1991.
- "Income Inequality and Measures of Well-Being: The Next Decade" American Statistical Association: 1990 Proceedings of the Social Statistics Section, 1991.

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- "On the Usefulness of Cyclical Taxonomy" (with J. R. Meyer), paper presented at the 12th CIRET [Center for International Research on Economic Tendency Surveys] Conference. Stockholm, Sweden, June 1975; published (in part) as "On the Classification of Recent Cyclical Experience", National Bureau of Economic Research 55th Annual Report, September 1975.
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- "Using the Survey of Income and Program Participation for Policy Analysis", U.S. Census Bureau Survey of Income and Program Participation Discussion Paper #240, January 2003.
- Guidelines for Income Distribution Statistics: Final Report of the International Expert [Canberra] Group on Household Income Statistics [to the United Nations Statistical Commission] (contributing author and editorial board member), March 2001.
- "Overview of the Proposed Standards for Income Distribution Statistics" (with J. Church, P. Everaers, M. McDonald, and L. Pietsch), paper prepared for the 26th General Conference of the International Association for Research in Income and Wealth, Cracow, Poland, August 2000.
- "The Survey of Income and Program Participation Recent History and Future Developments," U.S. Census Bureau Survey of Income and Program Participation Working Paper #230, January 1999 (revised 2002).
- "Tracking Devolution: The Survey of Program Dynamics" (with R. Kominski), prepared for the Population Association of America meetings, May 1997.
- "Informal Mechanisms for Government Decision-Making; Case Study of a Team Approach to Redesigning the Survey of Income and Program Participation," U.S. Census Bureau Survey of Income and Program Participation Working Paper #9311, June 1993.
- "Racial and Ethnic Economic Segregation in 1990" (with R. Harrison), prepared for the Population Association of America meetings, May 1993.

"The Survey of Income and Program Participation in the 1990s", U.S. Census Bureau Survey of Income and Program Participation Working Paper #9206 (part I), December 1992.

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"Implications of Mismeasuring the Consumer Price Index for Poverty Statistics", prepared for an American Enterprise Institute book (D. Besharov, ed.) *Measuring Poverty: Scientific Controversy and Political Implications* [publication cancelled], 1989 (revised).

"Evaluating the Family Support Act: Discussion Draft" (with W. Prosser and L. Mellgren), prepared for an Office of the Assistant Secretary for Planning and Evaluation-Institute for Research on Poverty workshop, April 1989.

"The Economic Effects of Welfare", prepared for the White House Office of Policy Development, July 1986; revised November 1986; published (as revised with P. Germanis) as *Up From Dependency, Supplement 4: Research Studies and Bibliography*, Executive Office of the President, Interagency Low Income Opportunity Advisory Board, April 1988.

"The Impacts of Tax Reform: Evaluation of the President's Tax Proposals and H.R. 3838", prepared for the Secretary of Health and Human Services, December 1985; revised to include an evaluation of the Senate Finance Committee bill, June 1986.

"The Effects of Government Programs on Marriage, Divorce, Fertility, Adoption, Living Arrangements, and Work", prepared for the Domestic Policy Council Working Group on Low Income Assistance, September 1985.

Final Report of the Seattle-Denver Income Maintenance Experiment (as editorial coordinator), U.S. Government Printing Office, May 1983.

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Housing Allowance Demand Experiment: Locational Choice, Part I: Search and Mobility (with R. Atkinson, A. Vidal, J. E. Wallace, and G. Weisbrod), Abt Associates Inc., August 1977.

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